

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-159523

(43)Date of publication of application : 13.06.2000

(51)Int.Cl. C01G 49/00
C04B 35/38
H01F 1/34
H01F 37/00
// H01F 27/255

(21)Application number : 10-333544 (71)Applicant : HITACHI METALS LTD
(22)Date of filing : 25.11.1998 (72)Inventor : UCHIKAWA TERUO
KOYUHARA TOKUKAZU
NAKAJIMA TAKESHI

(54) LOW LOSS FERRITE SINTERED COMPACT HAVING HIGHLY SATURATED
MAGNETIC FLUX DENSITY AND CHOKE COIL

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a low loss sintered compact having a high saturated magnetic flux density at a high temperature by composing main ingredients of a specified content of iron oxide, a specified content of zinc oxide and the rest of manganese oxide.

SOLUTION: This sintered compact has ≥ 450 T saturated magnetic flux density measured at 100° C and 100 A/m magnetic field, has $\leq 1,500$ kW/m³ minimum core loss measured at 50 kHz and 150 mT and has $\leq 15\%$ rate of change between the saturated magnetic flux density at 20° C and the one at 100° C. The sintered

compact comprises 60–70 mol% iron oxide, 0–20 mol% zinc oxide (with proviso that the content is not zero) and the rest of manganese oxide as main ingredients and is obtained by calcinating the mixture at $\geq 1,150^{\circ}\text{C}$ and $\leq 1\%$ oxygen concentration in a holder for calcination.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision
of rejection]

[Kind of final disposal of application other
than the examiner's decision of rejection
or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's
decision of rejection]

[Date of requesting appeal against
examiner's decision of rejection]

[Date of extinction of right]